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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,328	02/20/2004	Alexander Sherman	122	6885
50086 7590 12/26/2007 LAW OFFICE OF DAVID H. JUDSON 15950 DALLAS PARKWAY SUITE 225 DALLAS, TX 75248			EXAMINER SHAW, PELING ANDY	
			ART UNIT 2144	PAPER NUMBER
			MAIL DATE 12/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,328

Applicant(s)

SHERMAN ET AL.

Examiner

Peling A. Shaw

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

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DETAILED ACTION

1. This application has been examined. Claims 1-17 are presented for examination.

Priority

2. This application has no priority claim made. The filing date is 02/20/2004.

Drawings

3. Formal drawings are required in response to the instant Office action, i.e. mechanical drawing with text description in the drawings.

Claim Rejections - 35 USC § 112, second paragraph

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12, 15-17 are rejected under 35 U.S.C. 112, second paragraph as following:

- a. Claim 12 recites the limitation of “includes the steps of” in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purpose of applying art, this limitation is read as “includes functions of”.
- b. Claim 15 recites the limitation of “including the steps of” in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purpose of applying art, this limitation is read as “including functions of”.
- c. Claims 16-17 recite the limitation of “including the step of” in line 2. There is insufficient antecedent basis for this limitation in the claim. For the purpose of applying art, this limitation is read as “including a function of”.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffords et al. (US 20010042139 A1), hereinafter referred as Jeffords in view of Janis (US 5263165 A), hereinafter referred as Janis.

- a. Regarding claim 1, Jeffords shows (claim 1) a method operative in a system in which a set of distributed servers accept object submissions (paragraphs 59-66: services on resource objects), comprising: in response to receipt of a object submission at a given server (paragraph 56: an replicate resource manager (RRM) process starts; paragraphs 59-66: instantiate, delete, change attribute, receive attribute changes), accepting the object submission at the given server only if a given subset of the set of distributed servers agree to the object submission (paragraph 56: contact all other RRM; paragraph 57: all active RRM processes are reporting the same state information about each other, synchronize resource pools; paragraph 228: commit until all resource mangers in the resource pool confirmed the reception of and processing or synchronization); and upon acceptance of the object submission, staging the object for subsequent transport (paragraph 28: receive all of the resource objects in the pools of interest; paragraph 57: synchronization of resource pools is initiated). Jeffords does

not explicitly show an object could be a file. However Jeffords does show (paragraph 28) an object is a resource.

- b. Janis shows (column 1, lines 33-41) access control on system resources such as files within a distributed data processing system having multiple resource managers in an analogous art of providing user access control within a distributed data processing system having multiple resource managers.
- c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Jeffords' functions of managing resources in a distributed application and maintaining a relativistic view of state with Janis' functions of providing user access control within a distributed data processing system having multiple resource managers.
- d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to explicitly managing file as resource object per Janis' teaching (column 1, lines 33-41) in distributive resource management application as per Jeffords (paragraph 1) and Janis (column 1, lines 24-31)' teaching
- e. Regarding claim 2, Jeffords shows wherein the accepting step comprises: executing a data exchange protocol among the given subset until a given state is reached (paragraph 57: network state has been achieved via resource manager state vector exchange protocol; paragraphs 170-175: relativistic state, voting and agreement).
- f. Regarding claim 3, Jeffords shows wherein the data exchange protocol is a vector exchange (paragraph 57: resource manager state vector exchange protocol).

- g. Regarding claim 4, Jeffords shows wherein the vector exchange passes a data string from a first server to a second server where, upon receipt of the data string at the second server, the second server modifies the data string to indicate its receipt of the data string (paragraph 57: the user of state matrices filled by vectors received at each resource manager).
- h. Regarding claim 5, Jeffords shows wherein the accepting step includes having the given server determine its connectivity to the set of distributed servers prior to initiating the data exchange protocol (paragraph 57: establishes a dialog (connection)).
- i. Regarding claim 6, Jeffords shows wherein the accepting step includes having the given server deliver the file to those servers in the set of distributed servers to which the given server has connectivity (paragraphs 59-66: examine/use, instantiate and delete resource objects; paragraph 141: object transport including send and receive object's distributable representation).
- j. Regarding claim 7, Jeffords shows wherein the given subset of the set of servers is a quorum (see applicant's lines 1-3 on page 5: any required subset of all servers capable of accepting the file; paragraph 28: a resource manager specifies its pools of interest to all other active resource manager; paragraph 57: network state has been achieved; paragraph 150: RRM process has a consistent, synchronized view of the distributed memory in which it is interested).
- k. Regarding claim 8, Jeffords shows wherein the quorum is a majority (see applicant's line 31 on page 4 to line 3 on page 5: any required subset of all servers capable of

accepting the file; paragraph 28: a resource manager specifies its pools of interest to all other active resource manager; paragraph 57: network state has been achieved; paragraph 150: RRM process has a consistent, synchronized view of the distributed memory in which it is interested; paragraphs 170-175: relativistic state, voting and agreement).

Together Jeffords and Janis disclosed all limitations of claims 1-8. Claims 1-18 are rejected under 35 U.S.C. 103(a).

6. Claims 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeffords, Janis and further in view of Phillips et al. (US 7058696 B1), hereinafter referred as Phillips.

- a. Regarding claim 9, Jeffords shows (claim 9) a method operative in a system comprising a set of distributed servers, wherein each server has the capability of accepting a object submission (paragraphs 59-66: services on resource objects), comprising: in response to receipt at a given server of a request to submit a object (paragraph 56: an replicate resource manager (RRM) process starts; paragraphs 59-66: instantiate, delete, change attribute, receive attribute changes), having the given server determine its connectivity to other servers of the set (paragraph 57: establishes a dialog (connection)); having the given server output the file to each of the other servers to the given server has connectivity (paragraphs 59-66: examine/use, instantiate and delete resource objects; paragraph 141: object transport including send and receive object's distributable representation); if the object has been successfully pushed, having the given server initiate a data exchange protocol to each of the other servers to which the given server has connectivity (paragraph 57: establish a dialog

(connection), network state has been achieved via resource manager state vector exchange protocol); based on the data exchange protocol, determining whether a quorum of the servers have reached a given state (see applicant's lines 1-3 on page 5: any required subset of all servers capable of accepting the object; paragraph 28: a resource manager specifies its pools of interest to all other active resource manager; paragraph 57: all active RRM processes are reporting the same state information about each other, network state has been achieved; paragraph 150: RRM process has a consistent, synchronized view of the distributed memory in which it is interested); when the quorum of servers reach the given state, accepting the object for submission (paragraph 228: commit until all resource managers in the resource pool confirmed the reception of and processing or synchronization). Jeffords does show (paragraph 28) an object is a resource. Janis shows (column 1, lines 33-41) access control on system resources such as files within a distributed data processing system having multiple resource managers. Neither Jeffords nor shows encoding given information about the file into a temporary identifier; and having the given server output the file and its associated temporary identifier to each of the other servers to which the given server has connectivity.

- b. Phillips shows encoding given information about the file into a temporary identifier (column 16, line 45 to column 17, lines 5: one time password, bidirectional encryption/decryption key); and having the temporary identifier output to each of the other servers to which the given server has connectivity (Fig. 5: invite user; column

16, lines 21-44: invite a new user) in an analogous art of Internet-based shared file service with native PC client access and semantics.

- c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Jeffords' functions of managing resources in a distributed application and maintaining a relativistic view of state with Janis' functions of providing user access control within a distributed data processing system having multiple resource managers and Phillips' functions of using one time password to encrypt and decrypt access information.
- d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to explicitly managing file as resource object per Janis' teaching (column 1, lines 33-41) and using one time password to encrypt and decrypt access information per Phillips' teaching (column 16, line 45 to column 17, lines 5) in distributive resource management application as per Jeffords (paragraph 1), Janis (column 1, lines 24-31) and Phillips (column 34, lines 32-53)' teaching
- e. Regarding claim 10, Phillips shows wherein the temporary identifier comprises given information, the given information selected from a set of information that includes a filename, a timestamp, an identifier for the server at which the request is received, and a random string (column 19, line 45-column 20, lines 5: identifier of virtual storage device and a random string).
- f. Regarding claim 11, Jeffords shows wherein the data exchange protocol passes a knowledge vector (paragraph 57: resource manager state vector exchange protocol).

- g. Regarding claim 12, Jeffords shows wherein the data exchange protocol includes the steps of: having a server that receives the knowledge vector make a determination whether the knowledge vector identifies the server as having knowledge of the file; and if the server has knowledge of the file, having the server modify the knowledge vector to reflect this knowledge; having the server output the knowledge vector to the servers to which it has connectivity (paragraph 57: the user of state matrices filled by vectors received at each resource manager).
- h. Regarding claim 13, Jeffords shows wherein the quorum is a majority (see applicant's line 31 on page 4 to line 3 on page 5: any required subset of all servers capable of accepting the file; paragraph 28: a resource manager specifies its pools of interest to all other active resource manager; paragraph 57: network state has been achieved; paragraph 150: RRM process has a consistent, synchronized view of the distributed memory in which it is interested; paragraphs 170-175: relativistic state, voting and agreement).
- i. Regarding claim 14, Jeffords shows wherein the quorum is a given subset of the set of servers (see applicant's lines 1-3 on page 5: any required subset of all servers capable of accepting the file; paragraph 28: a resource manager specifies its pools of interest to all other active resource manager; paragraph 57: network state has been achieved; paragraph 150: RRM process has a consistent, synchronized view of the distributed memory in which it is interested).
- j. Regarding claim 15, Jeffords shows further including the steps of, at each server of the quorum and after the file is accepted: storing the file persistently in a local file

system (paragraphs 59-66: instantiate, delete, change attribute, receive attribute changes). Phillips shows removing the temporary identifier (column 16, line 45 to column 17, lines 5: one time password, bidirectional encryption/decryption key).

- k. Regarding claim 16, Jeffords shows further including the step of staging the file for subsequent delivery (paragraph 28: receive all of the resource objects in the pools of interest; paragraph 57: synchronization of resource pools is initiated).
- l. Regarding claim 17, Jeffords shows further including the step of having the given server issue a reply to a requesting client that the file submission was successful (paragraph 231: return when all available RMs and each of those RMs has synchronized with the new RM).

Together Jeffords, Janis and Phillips disclosed all limitations of claims 9-17. Claims 9-17 are rejected under 35 U.S.C. 103(a).

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Peling A Shaw
Patent Examiner
Art Unit 2144

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